

Claim 6, line 1, change "any preceding claim" to --claim 1--.

Claim 7, line 1, change "any preceding claim" to --claim 1--.

Claim 8, line 1, change "any preceding claim" to --claim 1--.

9. (amended) A method as claimed in claim [8] 1, characterized in that the PBMCs are cultured with the neisserial proteins and Interleukin 2 (IL-2) for a predetermined period and wherein the predetermined period is 3-10 days and may be 5 days.

10. (amended) A method as claimed in claim [8 or 9] 1, characterized in that the PBMCs are cultured with the neisserial proteins and Interleukin 2 (IL-2) for a predetermined period and wherein the IL-2 stimulates the proliferation of the activated T-cell lines and clones.

11. (amended) A method as claimed in claim [10] 1, characterized in that the PBMCs are cultured with the neisserial proteins and Interleukin 2 (IL-2) for a predetermined period and wherein the IL-2 stimulates the proliferation of the activated T-cell lines and clones and said T-cell lines and clones are maintained by weekly stimulation.

12. (amended) A method as claimed in claim [10 or claim 11] 1, characterized in that the PBMCs are cultured with the neisserial proteins and Interleukin 2 (IL-2) for a predetermined period and wherein the IL-2 stimulates the proliferation of the activated T-cell lines and clones and said stimulation is provided by proteins in the presence of IL-2 and feeder cells.

13. (amended) A method as claimed in claim [12] 1, characterized in that the PBMCs are cultured with the neisserial proteins and Interleukin 2 (IL-2) for a predetermined period and wherein the IL-2 stimulates the proliferation of the activated

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T-cell lines and clones and said stimulation is provided by proteins in the presence of IL-2 and feeder cells and said feeder cells are antigen presenting feeder cells and may be autologous Epstein-Barr virus transformed B-lymphocytes (EBVB).

Claim 14, line 1 change "any preceding claim" to --claim 1--.

15. (amended) A method as claimed in claim [14] 1, characterized in that the specificity of the T-cell lines and clones to neisserial proteins is tested prior to storing for example in liquid nitrogen and the specificity is tested by measurement of tritiated thymidine incorporation in response to stimulation with neisserial proteins compared to irrelevant antigens.

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16. (amended) A method as claimed in claim [14] 1, characterized in that [an] the specificity of the T-cell lines and clones to neisserial proteins is tested prior to storing for example in liquid nitrogen and the specificity is tested by measurement of tritiated thymidine incorporation in response to stimulation with neisserial proteins compared to irrelevant antigens and wherein said irrelevant antigen is tetanus toxoid.

Claim 17, line 1, change "any preceding claim" to --claim 1--, and after "that" change "the" to --a--;
line 2, delete "also".

18. (amended) A method as claimed in claim [17] 1, characterized in that the phenotype of the T-cell lines and clones are assessed using flow cytometry and specific monoclonal antibodies wherein the antibodies are CD4⁺, CD8⁻ and α/β - and γ/δ - T-cell receptor (TCR) specific monoclonal antibodies.

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Claim 19, line 4, delete "generated according to the method as claimed in any of the preceding claims".

Claim 21, line 1, delete "or 20".

Claim 22, line 1, change "21" to --19--.

Claim 23, line 1, change "any of claim 19 to 22" to --claim 19--.

24. (amended) A method as claimed in claim [23] 19, characterized in that polyclonal antibodies are raised to the T-cell stimulating fraction proteins and the antibodies are used to screen a genomic meningococcal and/or gonococcal expression library.

25. (amended) A method as claimed in claim [24] 19, characterized in that polyclonal antibodies are raised to the T-cell stimulating fraction proteins and the antibodies are used to screen a genomic meningococcal and/or gonococcal expression library and wherein the expression library is a λ ZapII library.

26. (amended) A method as claimed in claim [24 or claim 25] 19, characterized in that polyclonal antibodies are raised to the T-cell stimulating fraction proteins and isolated neisserial polypeptides which react with the antibodies and their respective DNA fragments are further characterized and sequenced.

Claim 28, line 3, delete "generated according to the method of any of claims 1 to 18".

Claim 29, line 1, delete "or claim 28".

30. (amended) A method according to claim [29] 27, characterized in that the genomic meningococcal or gonococcal expression library is a λ ZapII phage library expressing genomic DNA extracted from a strain of *Neisseria meningitidis* or a strain of *Neisseria gonorrhoea* and a representative pool of recombinant pBluescript SKII plasmid are excised from the phage library and transformed into *E. coli* strain XL1-Blue.

31. (amended) A method according to claim [30] 27, characterized in that the genomic meningococcal or gonococcal expression library is a λ ZapII phage library expressing genomic DNA extracted from a strain of *Neisseria meningitidis* or a strain of *Neisseria gonorrhoea* and a representative pool of recombinant pBluescript SKII plasmid are excised from the phage library and transformed into *E. coli* strain XL1-Blue and the plasmids are excised into XL1-Blue using a helper phage.

32. (amended) A method according to claim [30 or claim 31] 27, characterized in that the genomic meningococcal or gonococcal expression library is a λ ZapII phage library expressing genomic DNA extracted from a strain of *Neisseria meningitidis* or a strain of *Neisseria gonorrhoea* and a representative pool of recombinant pBluescript SKII plasmid are excised from the phage library and transformed into *E. coli* strain XL1-Blue and the transformed *E. coli* are cultured in a medium which may contain ampicillin.

Claim 33, line 1, change "any of claims 27 to 32" to --claim 27--.

Claim 34, line 1, change "any of claims 27 to 33" to --claim 27--.

Claim 35, line 1, change "any of claims 27 to 34" to --claim 27--.

Claim 36, line 1, change "any of claims 27 to 35" to --claim 27--.

37. (amended) A method as claimed in claim [36] 27, characterized in that CD4⁺ T-cell stimulating bacterial cultures are identified and subcultured and the subcultures are [preferably] rescreened for T-cell stimulation.

38. (amended) A method as claimed in claim [36 or claim 37] 27, characterized in that CD4⁺ T-cell stimulating bacterial cultures are identified and subcultured and the CD4⁺ T-cell stimulants are identified by sequencing and are further characterized.

Claim 39, line 1 change "any of claims 27 or 28" to --claim 27--.

Claim 41, line 3, delete "generated according to the method as claimed in any of claims 1 to 18".

Claim 42, line 1, change "any of claims 39 to 41" to --claim 40--.

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43. (amended) A method as claimed in claim [42] 40, characterized in that the genomic phage display library (PDL) is generated by fragmenting bacterial DNA, cloning and packaging into bacteriophage vectors wherein two vectors are used.

44. (amended) A method as claimed in claim [43] 40, characterized in that the genomic phage display library (PDL) is generated by fragmenting bacterial DNA, cloning and packaging into bacteriophage vectors wherein two vectors are used and the first vector displays peptides up to 1200 amino acids which are expressed at low copy numbers.

45. (amended) A method as claimed in claim [43 or claim 44] 40, characterized in that the genomic phage display library (PDL) is generated by fragmenting bacterial DNA, cloning and packaging into bacteriophage vectors wherein two vectors are used and wherein one [second] vector [preferably] displays up to 415 copies of a peptide up to 50 amino acids in size.

Claim 46, line 1, change "any of claims 40 to 45" to --claim 40--.

Claim 47, line 1, change "any of claims 40 to 46" to --claim 40--.

Claim 48, line 1, change "any of claims 40 to 47" to --claim 40--.

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49. (amended) A method as claimed in claim [48] 40, characterized in that CD4⁺ T-cell stimulating PDL cultures are identified and subcultured and the subcultures are rescreened for T-cell stimulation.

Claim 50, line 1, change "any of claims 40 to 49" to --claim 40--.

Claim 51, line 2, delete "in";

line 3, delete "accordance with any of claims 27 to 39".

53. (amended) A method as claimed in claim [52] 51, characterized in that the meningococcal or gonococcal genomic lambda phage display library is constructed by cloning randomly amplified PCR products using two random primers, each tagged at 5' end to restriction sites, inserting same into a predigested vector, and plating by infecting *E. coli* wherein the vector is a lambda phage.

54. (amended) A method as claimed in claim [53] 51, characterized in that the meningococcal or gonococcal genomic lambda phage display library is constructed by cloning randomly amplified PCR products using two random primers, each tagged at 5' end to restriction sites, inserting same into a predigested vector, and plating by infecting *E. coli* wherein the vector is λ PRH825 vector.

55. (amended) A method as claimed in claim [53 or 54] 51, characterized in that the meningococcal or gonococcal genomic lambda phage display library is constructed by cloning randomly amplified PCR products using two random primers, each tagged at 5' end to restriction sites, inserting same into a predigested vector, and plating by infecting *E. coli* and the amplified and digested DNA fragments are packaged into the lambda phage using a lambda phage packaging kit.

56. (amended) A method as claimed [any of claims 52 or 55] 51, characterized in that the meningococcal or gonococcal genomic lambda phage display library is constructed by cloning randomly amplified PCR products using two random primers, each tagged at 5' end to restriction sites, inserting same into a predigested vector, and plating by infecting *E. coli* and the restriction sites are SpeI or NotI.

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